

Appl No. 10/800,134
Amdt. dated February 8, 2007
Reply to Office Action of November 20, 2006
Page 7 of 8

RECEIVED
CENTRAL FAX CENTER

FEB 08 2007

Remarks

Claim 1 was amended to include the limitation of claim 3, now canceled.

In view of the above amendment and the following remarks, reconsideration of the outstanding office action is respectfully requested.

Examiner has rejected all pending claims (claims 1-31) under 35 U.S.C. §103(a) as being unpatentable over Li et al. (6,303,136) in view of O'Brien (7,014,807) and Lewis et al. (5,994,099) and Takezawa et al. (5,736,399). The rejection is respectfully traversed.

Claim 1, the only independent claim, has been amended to a fabric comprising: a yarn, said yarn comprising one or more sericin-extracted fibroin fibers that retain their native protein structure and have not been dissolved and reconstituted, said fibers being biocompatible and non-randomly organized, wherein said yarn promotes ingrowth of cells around said fibroin fibers and is biodegradable.

Li teaches an encapsulation device having a non-degradable filamentous matrix surrounded by a semi-permeable membrane. The encapsulation device is designed to contain cells or tissue for implantation within a host that in the absence of the membrane would provoke an immune response from the host. The function of the membrane is to be immuno-protective of the material held within.

Li teaches away from the present invention by teaching the matrix be made from "substantially non-degradable" fibers (col. 3, line 1). Li teaches that degradation would render the invention inoperable (col. 6, line 45). Li does not teach using sericin-extracted fibroin fibers as the matrix. The secondary references do not make up this deficiency.

O'Brien teaches the preparation of substantially sericin-free fiber but the fibers are produced through regeneration of decrystallized polypeptide. O'Brien teaches dissolving the silk protein, reconstituting it in solution, and re-spinning it to produce fiber threadline (col 3, line 50-64). Fatigue strength has generally been found to suffer in such reformed fibroin fibers. O'Brien's teaching differs from the claimed invention in which the fibroin fibers **have not** been dissolved and reconstituted.

Lewis teaches cloned DNA encoding spider flagelliform silk protein. As in O'Brien, Lewis teaches formation of fibers from **dissolved** protein (col 20, line 37).

10276856.1

Appl No. 10/800,134
Amdt. dated February 8, 2007
Reply to Office Action of November 20, 2006
Page 8 of 8

Takezawa teaches a culture-carrier using non-biodegradable surgical suture silk (col 6, line 33). It is well known in the art that surgical suture silk either contains sericin or has been coated with a hydrophobic composition such as a wax (see U.S. Patent No. 6,902,932, paragraph 0011). Such a composition repels or inhibits cells from attaching to the coated fiber. Takezawa teaches that silk "suture [is] non-biodegradable in a living organism" (col 5, line 59).

In light of the above, Applicants respectfully request that the rejection be withdrawn.

The Examiner has rejected all pending claims (claims 1-31) on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,902,932 B2 in view of O'Brien. The rejection is respectfully traversed in view of the amendment to claim 1.

As stated above, O'Brien teaches regeneration of decrystallized polypeptide by dissolving the silk protein, reconstituting it in solution, and re-spinning it to produce fiber threadline (col 3, line 50-64). Thus, the combination of U.S. Patent No. 6,902,932 B2 and O'Brien would not teach or suggest the claimed invention.

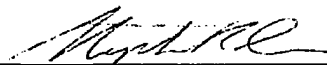
In view of all the foregoing, it is submitted that this case is in condition for allowance and such allowance is earnestly solicited.

The Examiner is authorized to charge and fee deficiencies or credit any overpayments associated with this submission to the Nixon Peabody LLP Deposit Account No. 50-0850.

Customer No. 50828

Respectfully submitted,

Date: February 8, 2007


David S. Resnick (Reg. No. 34,235)
Stephen R. Duly, Ph.D. (Reg. No. 56,183)
Nixon Peabody LLP
100 Summer Street
Boston, MA 0 2110
617-345-6057 / 1270

10276856.1